Intraseasonal-to-Interannual hydrologic prediction and water resource applications in the NAME Tier 1 core area

YEAR 2 PROGRESS REPORT

NOAA Cooperative Agreement number: NA060AR4310060

University of Washington PI: Dennis P. Lettenmaier

Reporting Period: 6/1/2007 - 5/31/2008 Report date: 4/10/08

Newsletter of the Climate Variability and Predictability Programme (CLIVAR) Exchanges **North American Monsoon Experiment: NAME** From Munoz-Arriola et al., page : Extended West-wide Seasonal Hydrological System: Seasonal Hydrological Prediction in the NAMS 30 70 80 90 95 99 100 percentile Figure 1: Soil Moisture Percentiles with respect to the 1960-1999 climatology for a) January 1st 2008 and b) January 15th 2008 CLIVAR is an international research programme dealing with climate variability and predictability on time-scales from months to centuries. CLIVAR is a component of the World Climate Research Programme (WCRP). WCRP is sponsored by the World Meteorological Organization, the International Council for Science and the Intergovernmental Oceanographic Commission of UNESCO.

Figure 1: Soil moisture percentiles (based on 1960-1999 climatology) on January 1st and January 15th, 2008

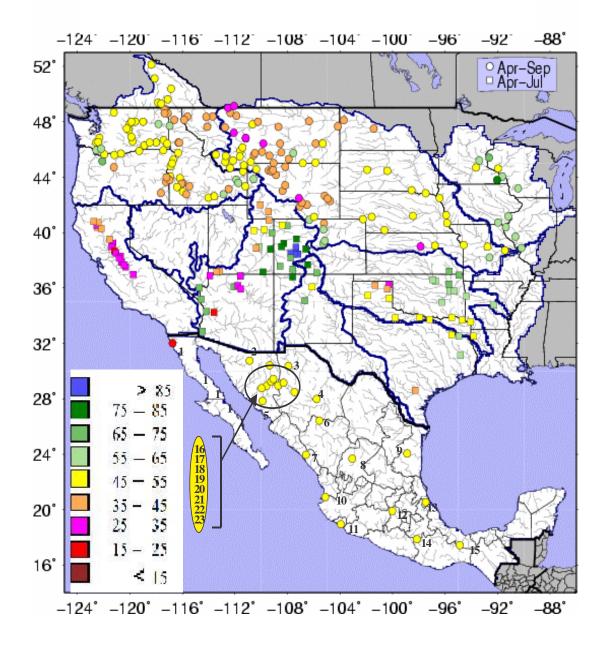


Figure 2: Streamflow percentiles (based on 1960-1999 climatology) on January $1^{\rm st}$ 2008 for the Apr-Sep forecast.

based on ranking of climatological ESP median Initialized 20070201 -- 1 month lead 27 21° 18° Predicted percentile of cumulative 3-month runoff based on ranking of climatological ESP median Initialized 20070501 -- 2 month lead -108' -102' -96' 30 27 24 18 15° Predicted percentile of cumulative 3-month runoff based on ranking of climatological ESP median Initialized 20070501 -- 3 month lead -108' -102' -96' 30 27 24 24 18

Predicted percentile of cumulative 3-month runoff

Figure 3: Cumulative runoff percentiles based on 1960-1999 climatology initialized in February 1st, May 1st and July 1st 2007 and with 1-, 2-, and 3-months lead periods, respectively.

10 20 30 70 percentile



Figure 4: Streamflow anomalies for the July 2007 to March 2008 from initializations in May 1st and July 1st 2007 at Paso Nacori and Agngostura stations.